

MEASURING ENTREPRENEURIAL INTENTIONS: DOES ENTREPRENEURIAL ORIENTATION MODERATE PERCEIVED BEHAVIORAL CONTROL?

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ABSTRACT: This study examines the effect of Perceived Behavioral Control (PBC) on Entrepreneurial Intention (EI), with Entrepreneurial Orientation (EO) as a moderating variable among Master of Management students at Ciputra University. Using a quantitative approach and SEM-PLS analysis of 172 respondents, the findings show that PBC positively and significantly influences EI, indicating that stronger behavioral control enhances entrepreneurial intention. However, EO does not moderate the relationship between PBC and EI, suggesting that individuals with high PBC rely more on personal confidence than entrepreneurial orientation traits. This study contributes to the Theory of Planned Behavior by clarifying the central role of behavioral control in entrepreneurial intention formation. Practically, the findings suggest that entrepreneurship programs should strengthen students' self-efficacy, confidence, and adaptive capabilities, particularly among Gen Z students.

Keywords: Perceived Behavioral Control, Entrepreneurial Intention, Entrepreneurial Orientation, Structural Equation Modeling, Gen Z

INTRODUCTION

Entrepreneurship in Indonesia continues to experience significant development and progress, which is the main driver of economic growth. In 2024 alone, the entrepreneurship ratio in Indonesia will increase by 2.05% to 3.35% from the previous year (Ministry of Cooperatives and SMEs, 2024). In the economic development of a country, entrepreneurship is one of the crucial factors, so the high desire and independent institutions have consistently organized various training programs, and this entrepreneurship is getting more and more attention (Kusio & Fiore, 2020). Hasmiyanti et al. (2022) explained that increasing global competition, rapid technological advances, and economic developments have made this field of entrepreneurship increasingly in demand by researchers and have become the focus of governments around the world.

In this modern era, there is an increase in interest in entrepreneurship among Gen Z, triggered by the development of digital technology and the creative economy. Generation Z can use technology, the internet, and social media, and prefer a career without following other people's rules (Nurfadilah, 2024). Pohan & Rialdy (2024) also said in their article that in the business sector, Gen Z has the desire and ambition to own their own business. This is evidenced by a survey conducted by Standard Chartered, cited in (Handayani & Lubis, 2023), which found that 72% of Gen Z and millennials aspire to own a business. Other studies have also found that the birth of digitalization and the development of a mindset that fosters innovative ideas encourage this generation to enter the world of entrepreneurship (Cirstea & Anagnoste, 2023; Yahnke, 2024). Dreyer & Stojanová (2023) argue that this generation is different from the previous generation, in that they are more goal-oriented and less motivated by financial gain, so they prioritize work-life balance. Valentino & Layman (2023) also found that Gen Z entrepreneurs pursue ventures driven by values, purpose, creativity, and personal satisfaction rather than just financial returns. These behavioral differences indicate that Gen Z's entrepreneurial tendencies may not fully align with traditional entrepreneurial models that emphasize financial motivation and risk-taking, thus creating a theoretical gap worth exploring in the entrepreneurship and management literature.

The phenomenon that currently exists among Gen Z who have a desire and interest in entrepreneurship is closely related to the traits of this generation, who are very adaptive to change, like to explore new things, and are critical in evaluating the shortcomings and advantages of something (Hail et al., 2024). What is also interesting is that they really want to achieve financial independence as early as possible, which also greatly encourages their entrepreneurial interest to be higher than that of previous generations (Kristiawan et al., 2019; Biclesanu et al., 2021). In addition, their desire for practical and fast things is supported by the presence of e-commerce and social media, which encourages Generation Z to create new business opportunities, innovate, and desire to realize creativity (Satalkina & Steiner, 2020). While these traits make Gen Z an entrepreneurial generation, there is still limited understanding in management research regarding how their self-perception and behavioral control translate into actionable entrepreneurial intentions. This lack of clarity highlights a need for empirical investigation grounded in established behavioral theories, such as the Theory of Planned Behavior (TPB). Another major concern in this phenomenon is that although many Gen Z individuals demonstrate enthusiasm toward entrepreneurship, not all of them have the confidence or behavioral intention to pursue it. These things are what make Gen Z actually interesting to research.

This study involves one of the variables of the Theory of Planned Behavior (TPB), namely Perceived Behavioral Control (PBC) and Entrepreneurial Intention (EI), by involving Entrepreneurial Orientation (EO) as the variable that moderates the relationship. In previous studies, there have not been many studies that involved EO in the relationship between PBC and EI. Also, this research is still rarely the focus of research, especially on Gen Z, who in the future will be the driving force behind various sectors in the world, especially the economy and technology, so understanding the things that drive their entrepreneurial intentions is important today. This study seeks to address this concern by examining two key factors, PBC, which reflects their confidence in their own abilities, and EO, which represents their innovativeness, risk-taking, and proactiveness. By addressing this research gap, the present study contributes to management and entrepreneurship theory by integrating individual psychological constructs

(PBC) with individual-level entrepreneurial orientation (EO), thus providing a more comprehensive understanding of how Gen Z develops entrepreneurial intentions as individual within modern digital and managerial contexts. Master of Management students at Ciputra University are the primary focus of this research, so that later this research will support educational institutions in designing and developing innovative, effective, and applicable learning programs to foster the spirit of entrepreneurship. In addition, the findings that will be obtained from this study are expected to make a real contribution to the development of education not only at Ciputra University but for all institutions or educational institutions, especially in Indonesia, for the development of relevant and wide-ranging educational strategies to support job creation, sustainable innovation and national economic growth.

THEORETICAL REVIEW

Entrepreneurial Intention (EI)

Entrepreneurial Intention (EI) generally refers to a person's intention to start planning and running a business. Schumpeter (1949) was the first to discover ideas related to entrepreneurship that have become the object of much research. In the focus of research on entrepreneurship so far, various factors that affect EI have been involved, including a person's personal characteristics and the surrounding social environment. In the research conducted, Anwar et al. (2020) argue that entrepreneurial intention is a person's tendency to establish their own company, become a leader in their own company, and the ability shown by a person to be entrepreneurial in the future.

Lee & Vincent (2021) argue that entrepreneurial intention is widely applied through Planned Behavior Theory (TPB) in understanding human behavior. This theory states that behavioral intentions are the best way to predict actual behavioral changes that are influenced by attitudes, subjective norms, and perceived behavioral control (Rizka Zulfikar et al., 2023). The Sustainable Development Goals (SDGs) have so far been used as a concept to analyze various human behaviors, including environmentally friendly consumer behavior, with online shopping as one of the efforts (Zulfikar et al., 2023; Sutisna & Handra, 2022). One of the important concepts produced from the SDGs is Perceived Behavioral Control, a derivative concept derived from the SDGs developed by Ajzen (1991).

Perceived Behavioral Control (PBC)

PBC is a person's view of how much they can control a specific behavior. Various studies have consistently shown that PBC positively impacts EI (Saraswati et al., 2021; Idrees et al., 2022; Mustofa & Setiawan, 2022; Otchengco & Akiate, 2021). However, these studies differ in context, methods, and the strength of the relationship between PBC and EI. For example, Saraswati et al. (2021) emphasized that self-efficacy and personal attitudes mediate the effect of PBC on EI. In contrast, Idrees et al. (2022) found that PBC acts as a mediating variable between personal characteristics and psychosocial factors on EI. Conversely, Mustofa & Setiawan (2022) found that educational attainment influences EI through PBC as a mediating variable. These differences indicate that although PBC consistently demonstrates a positive relationship with EI, its influence may vary depending on the context. This variation highlights the need for further research to clarify how PBC operates across different populations, including Generation

In recent studies, PBC variables have been applied in various contexts. For example, in the study of Hagger et al. (2022), it was found that PBC plays a role in strengthening the influence of the relationship between intentions and behavior in the health sector. However, this study also found that PBC does not strengthen the relationship between attitudes and intentions as well as subjective norms and intentions. However, in another study, Kumar et al. (2022) applied this expanded TPB model to study consumers' intentions to buy an environmentally friendly outfit. The study found that this PBC has the most decisive influence on the purchase intention. Meanwhile, in other field research, Aschwanden et al. (2021) found that the SDGs in COVID-19 pandemic prevention behavior have yielded results that PBC, attitudes, and subjective norms

independently influence each disease prevention behavior. Their research also found that PBC has the most influential contribution.

Other research has also explored how the perception of behavioral control plays a role in shaping entrepreneurial intentions. In their research, Vamvaka et al. (2020) found that PBC is an important factor that affects EI. This study discusses a person's beliefs about ease and difficulty in entrepreneurship. While Saraswati et al. (2021) and Mustofa & Setiawan (2022) emphasized the mediating role of PBC between entrepreneurial education and intention, Idrees et al. (2022) found that PBC also acts as a bridge linking personal characteristics and psychosocial factors with entrepreneurial intention. Although these studies were conducted in different cultural and contextual settings, their consistent findings reinforce that perceived control over entrepreneurial behavior is one of the strongest predictors of entrepreneurial intention. PBC also mediates between education subjects and entrepreneurial intentions, with the PBC variance produced at 29.2% (Mustofa & Setiawan, 2022). In another study involving PBC, the research was conducted by Otchengco & Akiate (2021), where structural support was obtained to strengthen the relationship between PBC and EI. In addition, personal attitudes and self-efficacy of entrepreneurship were found to affect the relationship between EI and PBC (Saraswati et al., 2021; Otchengco & Akiate, 2021). These findings suggest that while contextual differences exist, PBC consistently emerges as a central construct explaining how individuals translate their perceived abilities and control into entrepreneurial actions. The findings in these studies show that PBC can be applied in many fields, from health behavior to entrepreneurship, and impact policymakers in formulating development strategies.

H1: Perceived Behavioral Control positively and significantly influences Entrepreneurial Intention

Entrepreneurial Orientation (EO)

Entrepreneurial Orientation (EO) is a psychological construct that helps individuals understand why they engage in entrepreneurial activities (Bolton & Lane, 2012; Ibrahim & Masud, 2016). Lumpkin & Dess (1996) refined EO, a core research concept in management and entrepreneurship, into three dimensions: proactiveness, innovativeness, and risk-taking. Their framework provided the foundational understanding that entrepreneurial orientation represents an individual's or organization's strategic posture toward opportunity creation and risk management. Subsequent scholars have built upon this foundation to adapt EO beyond the organizational level. Although EO was originally conceptualized at the organizational level, it has since been widely adapted for individual-level analysis (Clark et al., 2023). This shift reflects the growing recognition that entrepreneurial behavior is not only driven by organizations but also applies to individual cognition and personality. Recent researchers, such as Clark et al. (2023), have expanded Lumpkin and Dess's seminal framework by exploring how EO manifests through personal attitudes, proactive mindsets, and innovation at the individual level. In other words, the modern view of EO integrates strategies from classical entrepreneurship theory with the psychological mechanisms that drive individual entrepreneurial behavior. These findings strengthen the conceptual foundation for applying EO as a moderating variable in individual-level entrepreneurship research.

According to Pihie & Akmaliah (2009), control over behavior is a belief that gives a person or individual the power and ability to control the outcome of their actions. It is this belief that allows a person to feel that they can control the decisions they make. Horswill & McKenna (2006) suggest that trust in one's decisions and actions can also reflect a tendency to face higher risks. Individuals with a good entrepreneurial orientation tend to be more proactive in identifying and managing potential risks in their new ventures and taking appropriate steps to address them (Kreiser et al., 2010). This entrepreneurial orientation helps them avoid market threats and gain a competitive advantage by taking advantage of existing market gaps (Boso et al., 2013). Thus, the survival of the newly pioneered business depends on the extent to which the owner is proactive in managing their business. In addition, business owners need to continue to monitor global market developments to capture existing opportunities and overcome all problems that have the potential to arise. This proactive behavior provides confidence that individuals can control their business entirely.

H2: entrepreneurial orientation significantly moderates the relationship between perceived behavioral control and entrepreneurial intention.

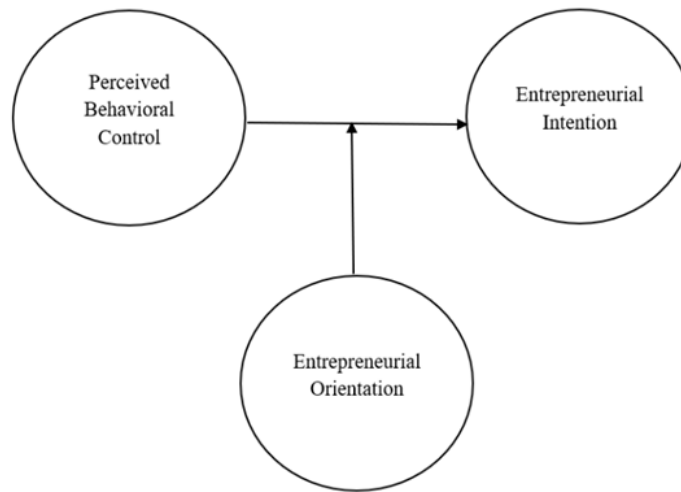


Figure 1. Conceptual Framework

RESEARCH METHOD

This research is a quantitative study using survey techniques. The research population is Master of Management students at Ciputra University Surabaya, aged 20–27 years (in the theory of mature age psychology). The use of students in the research was carried out by Bontis in 1998. According to Hair et al. (2010), the guideline for determining sample size in Structural Equation Model (SEM) analysis using the Maximum Likelihood estimation technique is 5–10 times the number of variable indicators. With 21 indicators in this study, the minimum number of samples calculated is $5 \times 21 = 105$. However, the researcher set a sample size of 172 respondents in this study. Each construct in the research model was measured using a Likert scale of 1 to 7, which was used to assess entrepreneurial intention (EI), perceived behavioral control (PBC), and entrepreneurial orientation (EO). EI was measured precisely using a questionnaire from Linan & Chen (2011). For PBCs, the original items from Linan & Chen (2009) were used, and for EO, the items were measured by indicators in the questionnaire by Bolton & Lane (2011). The researcher translated the questions in the questionnaire into Indonesian for adaptation strategies to regional languages. This study focuses specifically on PBC and excludes other dimensions of the TPB, such as attitudes toward entrepreneurship and subjective norms. This decision was based on theoretical and contextual considerations. Previous studies have consistently shown that PBC is the strongest predictor of EI among the three TPB components, especially in young and early-career populations (Anwar et al., 2020; Vamvaka et al., 2020).

Partial Least Square SEM (PLS-SEM) was analyzed using SmartPLS software for several methodological reasons. First, PLS-SEM is variance-based and well-suited for predictive and exploratory research models (Sarstedt et al, 2021). This study aims to predict and explain the moderating effect of EO on the relationship between PBC and EI, making PLS-SEM more appropriate than Covariance Based SEM (CB-SEM), which is primarily confirmatory. Second, PLS-SEM can handle complex models with mediating or moderating effects with smaller sample sizes while maintaining robust estimation accuracy (Hair et al, 2020). Although the sample size in this study ($n = 172$) technically also supports CB-SEM, this study focuses on prediction and exploration.

The data analysis process using PLS-SEM consists of two main stages: evaluation of the measurement model (outer model) and the structural model (inner model). In the outer model testing stage, the first step is to test convergent validity using outer loading (>0.6). Other studies have shown flexibility in the outer loading threshold. Wei Li et al. (2024) removed items with loadings below 0.40 in their study of 60 university lecturers. Wong Chin Yew et al. (2022) accepted all indicators with loadings above 0.50 in 34 indicators in their preschool study. Several studies also confirm that external loadings are used with average variance extracted (AVE) to assess convergent validity. Second, internal consistency reliability is tested using Cronbach's

alpha and composite reliability (>0.7). Third, convergent validity is tested using average variance extracted (AVE >0.5). Fourth, discriminant validity is tested using cross-loading. This study used the cross-loading criterion instead of the Heterotrait–Monotrait ratio (HTMT) to test discriminant validity. Although the HTMT approach has gained wider acceptance in recent years (Cheung et al., 2024), the use of cross-loading remains relevant in the initial stages of reflective construct validation, especially when researchers want to ensure the clarity and purity of indicators relative to the construct they measure (Hair et al., 2021). Therefore, cross-loading was used to verify that each indicator has a higher loading value on its latent construct than on other constructs, thus ensuring discriminant validity in this research design.

The second stage is the evaluation of the structural model, which includes testing the hypothesis of path coefficients and relationship significance, and calculating the coefficient of determination (R^2). In this study, the effect size (f^2), predictive relevance (Q^2) and fit model were also examined by the researchers to assess the predictive power and capability of the model (Hair et al., 2020). These steps were taken to ensure that this study's measurement and structural models met the quality and validity standards recommended for PLS-SEM analysis.

RESULTS

Researchers have sent questionnaires to 333 respondents. The data that returned and could be processed was 172 respondents, so the return rate of the questionnaire was 51.6%. Table 1 below is the respondent's descriptive analysis.

Table 1. Respondent Demographics

Descriptions	Unit	%
Gender		
Man	79	45.9
Woman	93	54.1
Work		
Employee-Manager/Director	7	4.1
Employee-Non-Manager/Director	18	10.5
Student	48	27.9
Business Owner (start-up/start your own)	34	19.8
Educator (teacher, lecturer)	4	2.3
Business successor (family business)	58	33.7
Profession (Doctor, Advocate, Psychologist, Accountant, Architect, Pharmacist)	3	1.7
Reasons for Taking a Master's Education		
Research and Academic Needs	3	1.7
Opening a business/Want to own your own business	14	8.1
Deepen Knowledge and Expertise to grow your own business.	46	26.7
Deepen Knowledge and Skills to develop/Continue parent/family business	59	34.3
Improving Professional Networks	15	8.7
Personal Interest and Desire to Learn	19	11.0
Career Development and Promotion in the Workplace	16	9.3

Based on gender categories, most respondents in this study were women, with a percentage of 54.1% or as many as 93 respondents. Meanwhile, male respondents were 45.9% or as many as 79 people. Based on the job category, most respondents, namely 33.7% or as many as 58 people, work as successors to the family business. The second largest group is respondents who are still students and have no income, which is 27.9% or as many as 48 people. Furthermore, as many as 19.8% of respondents, or 34, work as self-business owners, followed by 10.5% of respondents, or 18, who work as employees/staff. Respondents who worked as employees in manager/director positions were recorded as many as 4.1% or seven people. On the other hand, respondents who work as educators, teachers, and lecturers amounted to 2.3% or four people. Finally, only 1.7% of respondents, or three people, worked as experts in the profession, such as doctors, advocates, psychologists, accountants, architects, or pharmacists.

Based on the reasons for taking the S2 study, the majority of respondents, namely 34.3% or as many as 59 people, stated that they wanted to deepen their knowledge and expertise to develop or continue the parent/family business. The next largest group, as many as 26.7% or 46 respondents, revealed that the reason was to deepen their knowledge and expertise to develop their own business. As many as 11% or 19 respondents chose the reason for their interest and desire to study management science further, followed by 9.3% or 16 respondents who stated that the reason was career development and promotion in the workplace. As many as 8.7% or 15 respondents mentioned the reason for adding a professional network, while 8.1% or 14 wanted to open or own a business. Finally, only 1.7% or three respondents chose the reason for research and academic needs.

Table 2. Outer Model Evaluation

Variable	Item	Loading	AVE	Alpha (α)	CR
Entrepreneurial Intention	EI1	0.824	0.775	0.903	0.910
	EI2	0.909			
	EI4	0.903			
	EI5	0.882			
Entrepreneurial Orientation	EO1	0.763	0.512	0.883	0.901
	EO2	0.632			
	EO3	0.644			
	EO4	0.821			
	EO5	0.711			
	EO6	0.770			
	EO7	0.692			
	EO8	0.687			
	EO9	0.700			
Perceived Behavioral Control	PBC1	0.839	0.725	0.925	0.944
	PBC2	0.888			
	PBC3	0.845			
	PBC4	0.802			
	PBC5	0.857			
	PBC6	0.876			
PBC x EO	PBC x EO	1.000			

Note: EI = Entrepreneurial Intention; PBC = Perceived Behavioral Control; EO = Entrepreneurial Orientation

In the first test, the researcher conducted an external model test which aimed to evaluate and test whether the indicators that have been determined in this study are proven to be able to measure the latent variables used in this study, including entrepreneurial intention (EI), perceived behavior control (PBC), and entrepreneurial orientation (EO). Testing the outer model consists of testing validity and reliability. The research model with reflective indicators uses validity testing, including convergent and discriminant validity approaches. Convergent validity testing looks at the magnitude of the outer loading value. The indicator is declared valid when the outer loading value is above 0.6. It can be seen in Table 2 that all indicators in each variable have an outer loading value above 0.6, so that all indicators are valid. The validity of the convergence can also be seen from the AVE value of each variable studied. According to Hair et al. (2019), the AVE value for each variable must be above 0.5. In Table 2, all variables have an AVE value greater than 0.5, so it can be stated that all variables have met the convergent validity and can be continued to the following analysis stage.

As outlined in the research methodology section, this study adopted a threshold of 0.60 for outer loadings, supported by previous studies, where the acceptability of the above indicators was supported by their theoretical relevance and acceptable AVE values. Furthermore, eliminating these EO indicators would compromise the construct's content validity, as each indicator represents a distinct EO dimension (innovation, proactiveness, and risk-taking) (Lumpkin & Dess, 1996). Eliminating any of these indicators could compromise the theoretical integrity of EO by narrowing its conceptual scope. Therefore, these indicators were retained to maintain the construct's completeness and acceptable convergent validity and reliability across the model.

Reliability test is a method of testing measuring instruments to determine the consistency of measurement results of a research instrument. A prevalent method used for this test is Cronbach's Alpha and Composite Reliability values. A variable can be reliable if the Cronbach Alpha and Composite Reliability values exceed 0.6. The results shown in Table 2 show that all variables used in this study have Cronbach Alpha and Composite Reliability values far above 0.6, so that the measurement results for each variable have been consistent.

Table 3. Discriminant Validity

Items	EI	EO	PBC	EO x PBC
EI1	0.824	0.506	0.481	-0.178
EI2	0.909	0.618	0.588	-0.290
EI4	0.903	0.530	0.511	-0.285
EI5	0.882	0.508	0.484	-0.206
EO1	0.391	0.763	0.549	-0.214
EO2	0.258	0.632	0.499	-0.159
EO3	0.297	0.644	0.455	-0.213
EO4	0.562	0.821	0.605	-0.313
EO5	0.501	0.711	0.503	-0.188
EO6	0.597	0.770	0.480	-0.227
EO7	0.472	0.692	0.461	-0.163
EO8	0.369	0.687	0.531	-0.209
EO9	0.302	0.700	0.543	-0.138
PBC1	0.371	0.569	0.839	-0.185
PBC2	0.550	0.593	0.888	-0.339
PBC3	0.482	0.626	0.845	-0.240
PBC4	0.319	0.602	0.802	-0.255
PBC5	0.617	0.605	0.857	-0.375
PBC6	0.551	0.643	0.876	-0.368
EOxPBC	-0.276	-0.290	-0.358	1.000

The next outer model test is discriminant validity. Validity can be measured by looking at how strong the correlation between each indicator and its latent variable is. According to Cheung et al. (2024), each indicator represents only one latent variable. Suppose an indicator can measure two or more latent variables simultaneously. In that case, it will be difficult to prove that the two latent variables are different (Tanoto & Tami, 2024) from the results presented in Table 3, based on the output of cross-loading. In the output, it can be seen that the correlation of each indicator with its latent variable is higher when compared to other latent variables. The researcher can conclude that these indicators are also discriminant valid from these results.

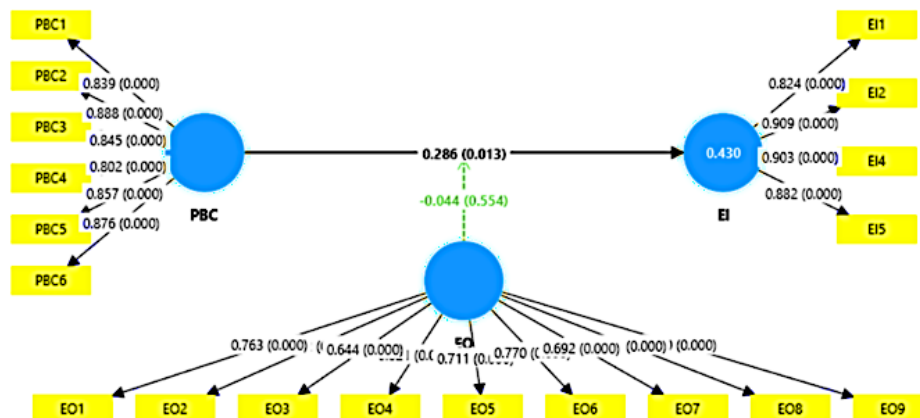


Figure 2. Inner Model Evaluation

After testing the outer model, the next step is to test the inner model. One method to test the inner model is the determination coefficient (R-squared). R-squared here is used to see how well the research model fits the existing data. Structural models with an R-squared value (R²) above 0.19 indicate the model is "weak." Conversely, an R-squared (R²) value above 0.33 indicates that the model is "moderate," and an R-squared (R²) above 0.67 indicates that the model is "good" (Ghozali, 2006). The results presented in Table 4 show that the R-Square value is 0.430, which means that the EI variables can be defined or explained by PBC and EO variables of 43%. In comparison, for the remaining 57% the EI variables are described by other variables that have not been used in this study.

Table 4. Hypothesis Test

Realized Relationship	Effect Size	t-value	p-value
EO -> EI	0.397	3.560	0.000
PBC -> EI	0.286	2.486	0.013
EO x PBC -> EI	-0.044	0.592	0.554

The results indicate that Entrepreneurial Orientation (EO) has a significant and positive effect on Entrepreneurial Intention (EI), with a path coefficient of 0.397, a t-value of 3.560, and a p-value of 0.000. This finding suggests that individuals with a stronger entrepreneurial orientation are more likely to develop higher entrepreneurial intentions. Similarly, Perceived Behavioral Control (PBC) also shows a significant positive relationship with EI, with a coefficient of 0.286, a t-value of 2.486, and a p-value of 0.013. This implies that the greater the confidence and perceived ability to control entrepreneurial behavior, the stronger the intention to pursue entrepreneurship. However, the interaction effect between EO and PBC on EI, with a coefficient of -0.044, a t-value of 0.592, and a p-value of 0.554, is not statistically significant. This result indicates that EO does not moderate the relationship between PBC and EI, meaning that EO neither strengthens nor weakens the effect of PBC on entrepreneurial intention.

In addition to identifying whether there is a significant relationship between variables, in this study it is also necessary to measure the influence between variables by using effect measurement testing. A small effect is indicated by an f-square value with a limit of 0.02, for a medium effect is indicated by a value of f-square with a limit of 0.15 and is said to indicate a significant effect size if the f-square value is at the limit of 0.35. Sarstedt et al, (2017) say that if the f-square value is below 0.02, then the effect size relationship can be ignored because it is considered to have no significant impact.

Next is predictive relevance testing. The purpose of this test is to help evaluate the predictive capabilities of a model, or in other words, to measure how well the model in this study can estimate its parameters. A model is said to have predictive relevance if the resulting Q-Square value is greater than 0, while if it is the other way around, it can be said that the model lacks or has no predictive relevance (Chin, 1998). It is found that the Q-Square value obtained in this study is 0.352. These results are above the acceptance threshold limit (above 0), so it can be concluded that the model in this study has a relevant predictive value. The last is the model suitability testing. This stage is also essential in SEM analysis. Model suitability testing aims to ensure that the model is built from the data and to help conclude whether it can adequately explain the relationships between variables. In the SEM PLS analysis, the model's suitability can be seen from the Standard Root Mean Square Residual (SRMR) and Adjacent Fit Index (NFI) indices. According to Hu & Bentler (1999) and Lohmöller (1989), a model is said to fit the data if it has an SRMR value smaller than 0.10 or 0.08, whereas the resulting NFI value must be greater than 0.90. The results shown in Table 8 show that the SRMR value produced in this study is 0.081, and the NFI value produced is 0.795. This NFI value is a marginal fit because it is still relatively close to the acceptance threshold.

DISCUSSION

The hypothesis test results showed that PBC affected EI. This confirms that the first hypothesis is accepted by the TPB theory put forward by Ajzen (1991). These findings suggest

that the perception of an individual's ability to control and carry out entrepreneurial behavior significantly affects their intention to become an entrepreneur. Previous research, such as that conducted by Barba-Sanchez et al. (2022) and Bazkiaei et al. (2021), supports these results, stating that PBC contributes positively and significantly to increased entrepreneurial intention in college students. If it is associated with the characteristics of the sample, namely Master of Management students of Ciputra University (UC), this result becomes increasingly relevant. Master's in management students at UC have generally gained an in-depth understanding of management science, including theory and practice, encouraging them to understand and hone entrepreneurial skills. This gives them greater confidence to manage resources, make strategic decisions, and take risks in entrepreneurship. Therefore, their perception of control over actions and success in entrepreneurship is an essential factor that drives EI.

In the following discussion, we want to determine how the moderating effect of the EO variable as a variable moderates the relationship between PBC and EI. From the results of the hypothesis testing that has been conducted and presented in Table 5, it can be seen that the resulting significance value is 0.554. Based on decision making, this value is greater than 0.05, so the EO variable, which acts as a moderator variable in this study, cannot strengthen the influence between PBC and EI. The relationship between EO and EI has been studied extensively in several studies, with mixed results regarding the role of EO as a moderating variable. Khan (2022) in his study found that EO can moderate the relationship between Attitudes towards EI. Still in line with this study, Khan (2022) also found that EO cannot moderate the relationship between PBC and EI. In another study, Ibrahim & Mas'ud (2016) found that EO can moderate the relationship between entrepreneurial skills and EI. However, they also found that EO was unsuccessful in moderating the relationship between environmental factors and EI. The differences in these findings reinforce the notion that the moderating function of EO is contextual. In academic settings, where individuals have had structured exposure to entrepreneurship, EO may act more as a fundamental trait than a differentiating moderator. This nuance supports the argument that the moderating impact of EO depends not only on an individual's psychological preparedness (as reflected in PBC) but also on external conditions such as institutional support, the learning ecosystem, and exposure to the entrepreneurial ecosystem. This insignificant moderation may also indicate that EO does not operate as a uniform construct, as evidence suggests that only innovation and risk-taking have been shown to increase an individual's entrepreneurial intentions (Efrata et al., 2021a). However, in another study, Efrata et al. (2021b) highlighted that only the individual innovation dimension influenced entrepreneurial intentions. This suggests that the innovation dimension may be the most prominent driver of EI in a student sample.

CONCLUSION AND FURTHER STUDY

This study concludes that Perceived Behavioral Control (PBC) serves as the primary determinant of Entrepreneurial Intention (EI) among Generation Z master's students. The findings confirm the central proposition of the Theory of Planned Behavior that individuals are more likely to develop entrepreneurial intentions when they perceive themselves as capable of controlling entrepreneurial actions and outcomes. In the context of entrepreneurship-oriented higher education, students' exposure to managerial knowledge, business practice, digital technology, and entrepreneurial role models strengthens self-efficacy and reinforces confidence in initiating business activities. In contrast, Entrepreneurial Orientation (EO) does not significantly moderate the relationship between PBC and EI. This finding indicates that innovation, proactiveness, and risk-taking tendencies may already constitute inherent characteristics of Generation Z, thereby reducing EO's role as a strengthening mechanism. The study therefore contributes to the TPB literature by clarifying that high levels of individual control perception may diminish the moderating relevance of EO, particularly within digitally literate and entrepreneurship-oriented populations. From a practical perspective, universities should prioritize programs that strengthen students' entrepreneurial confidence through experiential learning, mentoring systems, start-up incubation, business simulations, and stakeholder engagement initiatives that provide direct exposure to entrepreneurial decision-making processes.

This study is limited by its focus on students from a single entrepreneurship-oriented university, which restricts the broader generalizability of the findings across institutional and

socioeconomic contexts. In addition, the cross-sectional design limits the ability to observe changes in entrepreneurial intention over time. The adaptation of EO from an organizational-level construct into an individual-level context may also reduce its explanatory precision as a moderating variable. Future studies are therefore encouraged to incorporate longitudinal and cross-cultural approaches to examine the dynamic interaction between PBC, EO, and EI across different educational and cultural environments. Further research should also integrate contemporary variables such as entrepreneurial resilience, digital entrepreneurial ecosystems, adaptability, intrinsic motivation, and social support to develop a more contextually relevant understanding of entrepreneurial behavior among Generation Z in the digital economy.

ETHICAL DISCLOSURE

The research was conducted in accordance with academic ethical standards. Participants were informed about the purpose of the study and took part voluntarily through informed consent. All collected data were kept confidential and used solely for research purposes. No data manipulation or violation of academic integrity occurred during the study.

CONFLICT OF INTEREST

There is no conflict of interest.

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